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EXAMINER	
OCHOA, JUAN CARLOS	
ART UNIT	**PAPER NUMBER**
2123	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

MN

Office Action Summary	Application No.	Applicant(s)	
	10/828,850	HEAPS ET AL.	
	Examiner	Art Unit	
	Juan C. Ochoa	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) *14,16-21, 24, and 26–28* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13,15,22,23 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/19/04, 10/21/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Election filed 6/12/07 has been received and considered, claims 1–28 are pending in this application, claims 1–13, 15, 22, 23, and 25 have been elected with out traverse, claims 14, 16–21, 24, and 26–28 have been withdrawn as being directed to the non–elected invention. Claims 1–13, 15, 22, 23, and 25 are presented for examination.

Election/Restrictions

2. Applicant's election without traverse of Group I in the reply filed on 6/12/07 is acknowledged.

3. In the Requirement for Election/Restriction, Examiner inadvertently missed claims 26–28. Claims 26–28 are drawn to scheduling routes, classified in class 701, subclass 117. Examiner considers claims 26–28 to be in Group II and thus withdrawn as being directed to the non–elected invention.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because:

5. As to Figure 4, page 13, 3rd paragraph, line 5 of the specification refers to "200" and not reference character 400 as labeled in Figure 4.

6. As to Figure 4, page 13, 3rd paragraph, line 4 of the specification refers to "300" and not reference character 500 as labeled in Figure 4.

7. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with

37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1–13, 15, 22, 23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Roadnet 5000 Operations Guide - Version 7.0, (Roadnet hereinafter). (See IDS dated 10/19/04).

10. As to claim 1, Roadnet discloses a computer readable medium storing computer-executable instructions for: receiving a time window (see page 79); receiving "geographic area" information, said information defining a geographic area (see "ROUTENET is a calculation method that uses maps to reflect in detail the area being routed and to replicate the actual road conditions, accounting for everything from stop signs and traffic lights to speed limits and road changes" in page 20, last paragraph);

receiving a travel rule that is to apply to said geographic area during said time window (see "Step 8" in page 64); and after receiving said time window, said "geographic area" information, and said travel rule, applying said travel rule to said geographic area to schedule a route for one or more vehicles during said time window (see page 192).

11. As to claim 2, Roadnet discloses a computer readable medium further comprising: receiving a second time window (see "Step 8 ... The models can be set up this way or with more than one time period if your routes span more than one rush hour" in page 64); receiving a second travel rule that is to apply to said geographic area during said second time window (see "Step 9" in page 64); and after receiving said second time window and said second travel rule, applying said second travel rule to said geographic area to schedule a route for one or more vehicles during said second time window (see page 192).

12. As to claim 3, Roadnet discloses a computer readable medium further comprising: receiving a second travel rule that is to apply to said geographic area during said time window (see "Step 9" in page 64); and after receiving said second travel rule, applying said second travel rule to said geographic area to schedule a route for one or more vehicles during said time window (see page 192).

13. As to claim 4, Roadnet discloses a computer readable medium further comprising: receiving additional "geographic area" information, said additional information defining a second geographic area (see "Step 3: In the Zones window, click on the Add icon to open the Add Zone window. Hint: To add an entry that is similar to an existing one, right click on the existing entry and select Clone from the menu that pops

up. The Add window opens with some information already completed; change the information as necessary for the new entry" in page 70); receiving a second travel rule (see "Step 9" in page 64); after receiving said additional "geographic area" information and said second travel rule, applying said second travel rule to said second geographic area to schedule a route for one or more vehicles during said time window (see page 192).

14. As to claim 5, Roadnet discloses a computer readable medium wherein said travel rule comprises a speed variation model (see "XY—a routing method that uses a straight line to measure the distance between two points. This method relies on the Distance and Travel Time models to account for road changes and speed variation" in page 306, next to last paragraph), said speed variation model comprising a percentage increase or decrease from a normal travel speed (see "Step 8" in page 64).

15. As to claim 6, Roadnet discloses a computer readable medium wherein said travel rule comprises one or more vehicle based restrictions that are to apply to said geographic area during said time window (see "restrictions" in page 198).

16. As to claim 7, Roadnet discloses a computer readable medium wherein said "geographic area" information comprises three of more points selected by a user to define a polygon, said polygon having boundaries that define a geographic area (see "Draw any shape to create a cell. Note that the cell follows actual streets. The dark lines are the cell boundary, and the small squares are the points where the cell boundary turns or ends" in page 112).

17. As to claim 8, Roadnet discloses a computer readable medium storing computer-executable instructions for: receiving a time window (see page 79); receiving "geographic area" information, said information defining a geographic area (see "ROUTENET is a calculation method that uses maps to reflect in detail the area being routed and to replicate the actual road conditions, accounting for everything from stop signs and traffic lights to speed limits and road changes" in page 20, last paragraph); receiving a travel rule that is to apply to said geographic area during said time window (see "Step 8" in page 64); and after receiving said time window, said "geographic area" information, and said travel rule, applying said one or more travel rules to determine whether to schedule a route for one or more vehicles through at least a portion of said geographic area during said time window (see page 192).

18. As to claim 9, Roadnet discloses a computer readable medium wherein the travel rule comprises a speed variation model (see "XY—a routing method that uses a straight line to measure the distance between two points. This method relies on the Distance and Travel Time models to account for road changes and speed variation" in page 306, next to last paragraph), said speed variation model comprising a percentage increase or decrease from a normal travel speed (see "Step 8" in page 64).

19. As to claim 10, Roadnet discloses a computer readable medium wherein the travel rule comprises one or more vehicle based restrictions that are to apply to said geographic area during said time window (see "restrictions" in page 198).

20. As to claim 11, Roadnet discloses a computer readable medium storing computer-executable instructions for: receiving a time window (see page 79); receiving

"geographic area" information, said information defining a geographic area (see "ROUTENET is a calculation method that uses maps to reflect in detail the area being routed and to replicate the actual road conditions, accounting for everything from stop signs and traffic lights to speed limits and road changes" in page 20, last paragraph); receiving a travel rule that is to apply to said geographic area during said time window (see "Step 8" in page 64); and after receiving said time window, said "geographic area" information, and said travel rule, applying said travel rule to model the speed of travel of one or more vehicles traveling through said geographic area during said time window (see "ROADNET 5000 uses travel time models to calculate the speed traveled between two points based on the distance traveled" in page 61, 2nd paragraph, lines 1–2).

21. As to claim 12, Roadnet discloses a computer readable medium wherein the travel rule comprises a speed variation model (see "XY—a routing method that uses a straight line to measure the distance between two points. This method relies on the Distance and Travel Time models to account for road changes and speed variation" in page 306, next to last paragraph), said speed variation model comprising a percentage increase or decrease from a normal travel speed (see "Step 8" in page 64).

22. As to claim 13, Roadnet discloses a computer readable medium wherein the travel rule comprises one or more vehicle-based restrictions that are to apply to said geographic area during said time window (see "restrictions" in page 198).

23. As to claim 15, Roadnet discloses a computer readable medium storing computer-executable instructions for: receiving a first geographic area and a first travel rule that is associated with said first geographic area (see "ROUTENET is a calculation

method that uses maps to reflect in detail the area being routed and to replicate the actual road conditions, accounting for everything from stop signs and traffic lights to speed limits and road changes" in page 20, last paragraph); receiving a second geographic area, said second geographic area at least partially overlapping said first geographic area, wherein an area within both said first geographic area and said second geographic area defines an overlapped geographic area (see "Step 3: In the Zones window, click on the Add icon to open the Add Zone window. Hint: To add an entry that is similar to an existing one, right click on the existing entry and select Clone from the menu that pops up. The Add window opens with some information already completed; change the information as necessary for the new entry" in page 70); receiving a second travel rule that is associated with said second geographic area (see "Step 9" in page 64); after receiving said first and second geographic areas and said first and second travel rules, determining whether said first or said second travel rule should be applied to one or more vehicles traveling through at least a portion of said overlapped geographic area (see page 192); in response to determining that the first travel rule should be applied to one or more vehicles traveling within the overlapped geographic area, applying the first travel rule to model traffic conditions (see "Step 10: Repeat Steps 6 – 9 to add additional times to the rush hour model if your routes span more than one rush hour (for example, morning rush hour and increased lunchtime traffic)" in page 65) for one or more vehicles traveling through at least a portion of the overlapped geographic area (see page 192); and in response to determining that the second travel rule should be applied to one or more vehicles traveling within the

overlapped geographic area, applying the second travel rule to model traffic conditions (see "Step 10: Repeat Steps 6 – 9 to add additional times to the rush hour model if your routes span more than one rush hour (for example, morning rush hour and increased lunchtime traffic)" in page 65) for one or more vehicles traveling through at least a portion of the overlapped geographic area (see page 192).

24. As to claim 22, Roadnet discloses a computer readable medium storing computer-executable instructions for: receiving a time window (see page 79); receiving "road segment" information, said information defining a road segment (see "segment" in page 305); receiving a speed variation model (see "XY—a routing method that uses a straight line to measure the distance between two points. This method relies on the Distance and Travel Time models to account for road changes and speed variation" in page 306, next to last paragraph) that is to apply to said road segment, said speed variation model comprising a percentage increase or decrease from a normal travel time (see "Step 8" in page 64); and after receiving said "road segment" information and said speed variation model, applying said speed variation model to schedule one or more routes (see page 192).

25. As to claim 23, Roadnet discloses a computer readable medium storing computer executable instructions for: receiving "geographic area" information, said information defining a geographic area (see "ROUTENET is a calculation method that uses maps to reflect in detail the area being routed and to replicate the actual road conditions, accounting for everything from stop signs and traffic lights to speed limits and road changes" in page 20, last paragraph); receiving a first time window (see page

79) in which a first speed variation model (see "XY—a routing method that uses a straight line to measure the distance between two points. This method relies on the Distance and Travel Time models to account for road changes and speed variation" in page 306, next to last paragraph) is to apply within the geographic area; receiving a second time window (see "Step 8 ... The models can be set up this way or with more than one time period if your routes span more than one rush hour" in page 64) in which a second speed variation model is to apply within the geographic area (see "XY—a routing method that uses a straight line to measure the distance between two points. This method relies on the Distance and Travel Time models to account for road changes and speed variation" in page 306, next to last paragraph); after receiving said "geographic area" information, said first time window and said first speed variation model, applying said first speed variation model to estimate a travel time associated with vehicles traveling within at least a portion of said geographic area within said first time window (see "Travel Time Model" in page 22); and after receiving said "geographic area" information, said second time window and said second speed variation model, applying said second speed variation model to model traffic conditions for one or more vehicles traveling within at least a portion of said geographic area within said second time window (see "Step 10: Repeat Steps 6 – 9 to add additional times to the rush hour model if your routes span more than one rush hour (for example, morning rush hour and increased lunchtime traffic)" in page 65).

26. As to claim 25, Roadnet discloses a computer readable medium storing computer-executable instructions for: receiving "geographic area" information, said

information defining a geographic area (see "ROUTENET is a calculation method that uses maps to reflect in detail the area being routed and to replicate the actual road conditions, accounting for everything from stop signs and traffic lights to speed limits and road changes" in page 20, last paragraph); receiving a first speed variation model (see "XY—a routing method that uses a straight line to measure the distance between two points. This method relies on the Distance and Travel Time models to account for road changes and speed variation" in page 306, next to last paragraph) that is to apply to a first road classification within the geographic area (see "local roads and larger roads (such as highways)" in page 61, 2nd paragraph); receiving a second speed variation model that is to apply to a second road classification within the geographic area (see "local roads and larger roads (such as highways)" in page 61, 2nd paragraph); after receiving said "geographic area" information, said first speed variation model, and said first road classification, applying the first speed variation model to estimate travel times associated with vehicles traveling on roads of the first classification through at least a portion of the geographic area (see "Travel Time Model" in page 22); and after receiving said "geographic area" information, said second speed variation model, and said second road classification, applying the second speed variation model to estimate travel times associated with vehicles traveling on roads of the second classification through at least a portion of the geographic area (see "Travel Time Model" in page 22).

Conclusion

27. Examiner would like to point out that any reference to specific figures, columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan C. Ochoa whose telephone number is (571) 272-2625. The examiner can normally be reached on 7:30AM - 4:00 PM.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*** 8/28/07

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